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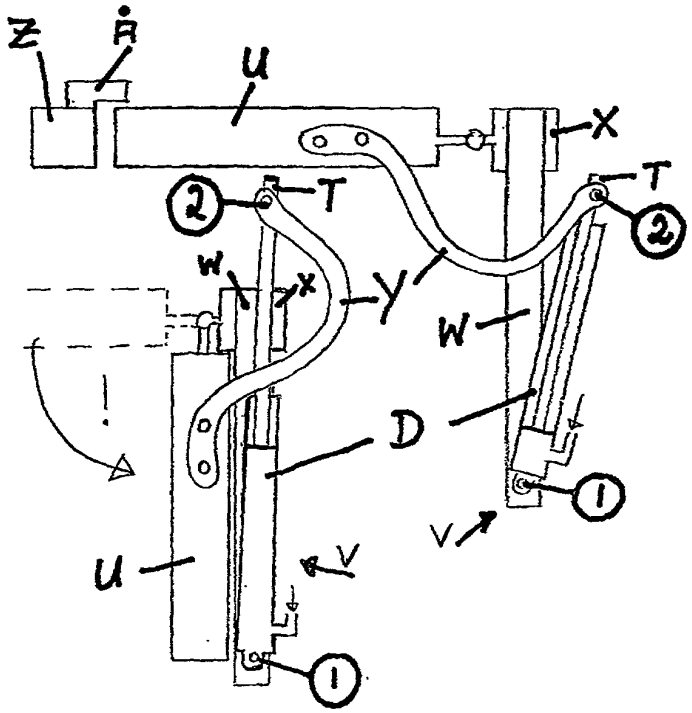
(54) Title: APPARATUS FOR OPERATING GATES AND THE LIKE



(57) Abstract: The invention relates to an apparatus for operating a gate (U), which apparatus is provided with a pressure generating unit, which can be mounted in the ground and which is provided with a hydraulic cylinder (A) as well as restoring springs (O) and which by means of a hydraulic circuit system actuates an opening and closing mechanism for said gate. According to the invention said cylinder (A) is designed as a primary compression cylinder, which hydraulically is connected partly to an accumulator tank (C), to accumulate a portion of the force as an overpressure, and partly to a secondary opening cylinder (D), to open the gate (U) against the force of a closing valve (V). The overpressure in the liquid is released through a duct to an expansion tank (B) through a check valve (G) in order to delay the discharge process, an effect being obtained only after the fact, that a car has passed the apparatus and the gate and that the overpressure in the expansion tank has started to decrease. Pressure peaks from very heavy cars and a second and a third axle on a car respectively will be released directly through an overpressure valve (I) back into the expansion tank.

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ABSTRACT

The invention relates to an apparatus for operating a gate (U), which apparatus is provided with a pressure generating unit, which can be mounted in the ground and which is provided with a hydraulic cylinder (A) as well as restoring springs (O) and which by means of a hydraulic circuit system actuates an opening and closing mechanism for said gate. According to the invention said cylinder (A) is designed as a primary compression cylinder, which hydraulically is connected partly to an accumulator tank (C), to accumulate a portion of the force as an overpressure, and partly to a secondary opening cylinder (D), to open the gate (U) against the force of a closing valve (V). The overpressure in the liquid is released through a duct to an expansion tank (B) through a check valve (G) in order to delay the discharge process, an effect being obtained only after the fact, that a car has passed the apparatus and the gate and that the overpressure in the expansion tank has started to decrease. Pressure peaks from very heavy cars and a second and a third axle on a car respectively will be released directly through an overpressure valve (I) back into the expansion tank.